WO 03/089117 PCT/US03/11166

8. The process of claim 1 wherein said membrane has a thickness of 5-10 microns.

- 5 9. The process of claim 1 wherein said membrane is supported.
 - 10. The process of claim 1 wherein said cell is heated to between 800 and 1000C.
- 10 11. The process of claim 1 wherein said purified hydrogen is separated at the exit of said second side by passing effluent from said second side through a condenser.
- 12. The process of claim 2, wherein said other hydrocarbons are selected from the group consisting of propane, butane, octane and mixtures thereof.